

USHBC Published Studies

Antioxidant Activity

- Blacker BC, Snyder SM, Eggett DI, Parker TI. **Consumption of blueberries with a high-carbohydrate, low-fat breakfast decreases postprandial serum markers of oxidation.** *British Journal of Nutrition.* 2013, 109:1670-1677*
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Bioavailability/Metabolism

- Hanley MJ, Masse G, Harmatz JS, Cancalon PF, Dolnikowski GG, Court MH, Greenblatt DJ. **Effect of blueberry juice on clearance of buspirone and flurbiprofen in human volunteers.** *British Journal of Clinical Pharmacology.* 2012, 75:1041-1052.
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- Milbury PE, Kalt W. **Xenobiotic metabolism and berry flavonoid transport across the blood-brain barrier.** *Journal of Agricultural and Food Chemistry.* 2010, 58:3950-3956
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- Kalt W, Blumberg JB, McDonald JE, Vinqvist-Tymchuk MR, Fillmore SAE, Graf BA, O'Leary JM, Milbury PE. **Identification of anthocyanins in the liver, eye, and brain of blueberry-fed pigs.** *Journal of Agricultural and Food Chemistry.* 2008; 56:705-12.
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Bone and Joint Health




- Devareddy L, Hooshmand S, Collins JK, Lucas EA, Chai SC, Arjmandi BH. **Blueberry prevents bone loss in ovariectomized rat model of postmenopausal osteoporosis.** *Journal of Nutritional Biochemistry.* 2008; 19:694-699
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Brain Function

- Shukitt-Hale B, Thangthaeng N, Miller MG, Poulouse SM, Carey AN, Fisher DR. **Blueberries improve neuroinflammation and cognition differentially depending on individual cognitive baseline status.** *J. Gerontol A Biol Sci Med Sci.* 2019, 74:977-983.*
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- Krishna G, Ying Z, Gomez-Pinilla F. **Blueberry supplementation mitigates altered brain plasticity and behavior after traumatic brain injury in rats.** *Mol Nutr Food Res.* 2019.
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- Miller MG, Hamilton DA, Joseph JA, Shukitt-Hale B. **Dietary blueberry improves cognition among older adults in a randomized, double-blind, placebo-controlled trial.** *European Journal of Nutrition.* 2017
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-  **Carey AN**, Gildawie KR, Rovnak A, Thangthaeng N, Fisher DR, Shukitt-Hale B. **Blueberry supplementation attenuates microglia activation and increases neuroplasticity in mice consuming a high-fat diet.** *Nutritional Neuroscience*. 2019.
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-  Poulouse SM, Rabin BM, Bielinski DF, Kelly ME, Miller MG, Thanthaeng N, Shukitt-Hale B. **Neurochemical differences in learning and memory paradigms among rats supplemented with anthocyanin-rich blueberry diets and exposed to acute doses of ⁵⁶Fe particles.** *Life Sciences in Space Research*. 2017, 12:16-23*
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-  Ebenezer PJ, Wilson CB, Wilson LD, Nair AR, Francis J. **The anti-inflammatory effects of blueberries in an animal model of post-traumatic stress disorder (PTSD).** *PLoS One* 2016, 11:e0180923.
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-  **Carey AN**, Gomes SM, Shukitt-Hale B. **Blueberry supplementation improves memory in middle-aged mice fed a high-fat diet.** *Journal of Agricultural and Food Chemistry*. 2014,62:3972-3978.
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-  Boespflug EL, Eliassen JC, Dudley JA, Shidler MD, Kalt W, Summer SS, Stein AL, Stover AN, **Krikorian R.** **Enhanced neural activation with blueberry supplementation in mild cognitive impairment.** *Nutritional Neuroscience*. 2017.
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-  Shukitt-Hale B. **Blueberries and neuronal aging.** *Gerontology*. 2012, 58:518-523.
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-  **McGuire SO**, Sortwell CE, Shukitt-Hale B, Joseph JA, Hejna MJ, Collier TJ. **Dietary supplementation with blueberry extract improves survival of transplanted dopamine neurons.** *Nutritional Neuroscience*. 2006; 9:251-258.
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Cancer


-  Jeyabalan J, Aqil F, Munagala R, Annamalai L, Vadhanam MV, **Gupta RC.** **Chemopreventive and therapeutic activity of dietary blueberry against estrogen-mediated breast cancer.** *Journal of Agricultural and Food Chemistry*. 2014, 62:3963-3971,
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-  Kanaya N, Adams L Takasaki A, **Chen S.** **Whole blueberry powder inhibits metastasis of triple negative breast cancer in a xenograft mouse model through modulation of inflammatory cytokines.** *Nutrition and Cancer*. 2014, 66:242-248.
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-  **Adams LS**, Kanaya N, Phung S, Liu Z, Chen S. **Whole blueberry powder modulates the growth and metastasis of MDA-MB-231 triple negative breast tumors in nude mice.** *Journal of Nutrition* 2011, 141:1805-1812.
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Cardiovascular/Lipids


- Curtis PJ, van der Velpen V, Berends L, Jennings A, Feelisch M, Umpleby AM, Evans M, Fernandez BO, Meiss MS, Minnion M, Potter J, Minihane AM, Kay CD, Rimm EB, Cassidy A. **Blueberries improve biomarkers of cardiometabolic function in participants with metabolic syndrome-results from a 6-month, double-blind, randomized controlled trial.** *The American Journal of Clinical Nutrition.* 2019, 109:1535-1545.
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- Johnson SA, Figueroa A, Navaei N, Wong A, Kalfon R, Ornsbee LT, Feresin RG, Elam MI, Hooshmand S, Payton ME, Arjmandi BH. **Daily blueberry consumption improves blood pressure and arterial stiffness in postmenopausal women with pre- and stage 1-hypertension: A randomized, double-blind, placebo-controlled clinical trial.** *Journal of the Academy of Nutrition and Dietetics.* 2015, 115:369-377.
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- Stull AJ, Cash KC, Champagne CM, Gupta AK, Boston R, Beyl RA, Johnson WD, Cefalu WT. **Blueberries improve endothelial function, but not blood pressure, in adults with metabolic syndrome: A randomized, double-blind, placebo-controlled clinical trial.** *Nutrients* 2015, 7:4107-4123.
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- Basu A, Du M, Leyva MJ, Sanchez K, Betts NM, Wu M, Aston CF, Lyons TJ. **Blueberries decrease cardiovascular risk factors in obese men and women with metabolic syndrome.** *Journal of Nutrition.* 2010, 140:1582-1587.
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- Kalt W, Foote K, Fillmore SAE, Lyon M, Van Lunen TA, McRae KB. **Effect of blueberry feeding on plasma lipids in pigs.** *British Journal of Nutrition.* 2008; 100:70-78.
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Diabetes/Insulin Resistance

- Liu W, Mao Y, Schoenborn J, Wang Z, Tang G, Tang X. **Whole blueberry protects pancreatic beta-cells in diet-induced obese mouse.** *Nutr & Metab.* 2019, 16:34.
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- Elks CM, Terrebonne JD, Ingram DK, Stephens JM. **Blueberries improve glucose tolerance without altering body composition in obese postmenopausal mice.** *Obesity* 2015, 23:573-580.*
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- Seymour EM, Tanone II, Urcuyo-Llanes DE, Lewis SK, Kirakosyan A, Kondoleon MG, Kaufman PB, Bolling SF. **Blueberry intake alters skeletal muscle and adipose tissue peroxisome proliferator-activated receptor activity and reduces insulin resistance in obese rats.** *Journal of Medicinal Food.* 2011, 14:1511-1518.
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- Stull AJ, Cash KC, Johnson WD, Champagne CM, Cefalu WT. **Bioactives in blueberries improve insulin sensitivity in obese, insulin-resistant men and women.** *Journal of Nutrition.* 2010, 140:1764-1768.
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-  DeFuria J, Bennett G, Strissel KJ, Perfield JW II, Milbury PE, Greenberg AS, Obin MS. **Dietary blueberry attenuates whole-body insulin resistance in high fat-fed mice by reducing adipocyte death and its inflammatory sequelae.** *Journal of Nutrition.* 2009; 139:1510-1516.
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Exercise

-  McAnulty LS, Nieman DC, Dumke CL, Shooter LA, Henson DA, Utter AC, Milne G, McAnulty SR. **Effect of blueberry ingestion on natural killer cell counts, oxidative stress, and inflammation prior to and after 2.5 h of running.** *Applied Physiology, Nutrition, and Metabolism* 2011;36:976-984.
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Eye Health

-  Tremblay F, Waterhouse J, Nason J, Kalt W. **Prophylactic neuroprotection by blueberry-enriched diet in a rat model of light-induced retinopathy.** *Journal of Nutritional Biochemistry* 2013, 24:647-655.
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Food Safety

-  Bialka KI, Demirci A. **Decontamination of Escherichia coli 0157:H7 and Salmonella enterica on blueberries using ozone and pulsed UV-light.** *Journal of Food Science.* 2007, 72:M391-396.
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-  Popa I, Hanson EJ, Todd ECD, Schilder AC, Ryser ET. **Efficacy of chlorine dioxide gas sachets for enhancing the microbiological quality and safety of blueberries.** *Journal of Food Protection* 2007, 70:2084-2088.
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Gut Health

-  Polewski MA, Esquivel-Alvarado D, Wedde Ns, Kruger CG, Reed JD. **Isolation and characterization of blueberry polyphenolic components and their effects on gut barrier dysfunction.** *J Agric Food Chem.* 2019
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-  Lee S, Keirsey KI, Kirkland R, Grunewald ZI, Fischer JG, de La Serre CB. **Blueberry supplementation influences the gut microbiota, inflammation, and insulin resistance in high-fat-diet-fed rats.** *Journal of Nutrition* 2018; 148:209-219.*
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Immune Function

-  Lewis ED, Ren Z, DeFuria J, Obin MS, Meydani SN, Wu D. **Dietary supplementation with blueberry partially restores T-cell-mediated function in high-fat-diet-induced obese mice.** *British Journal of Nutrition* 2018, 119:1393-1399.*
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-  Nair AR, Mariappan N, Stull AJ, Francis J. **Blueberry supplementation attenuates oxidative stress within monocytes and modulates immune cell levels in adults with metabolic syndrome: a randomized, double-blind, placebo-controlled trial.** *Food and Function.* 2017.

Inflammation

- South S, Lucero J, Vijayagopal P, Juma S. **Anti-inflammatory action of blueberry polyphenols in HIG-82 rabbit synoviocytes.** *J Med Food.* 2019*
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- Du C, Smith A, Avalos M, South S, Crabtree K, Wang W, Kwon Y, Vijayagopal P, **Juma S. Blueberries improve pain, gait performance, and inflammation in individuals with symptomatic knee osteoarthritis.** *Nutrients.* 2019; 11:E290.
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- Ono-Moore KD, Snodgrass RG, Huang S, Singh S, Freytag TI, Burnett DJ, Bonnel EI, Woodhouse LR, Zunino SJ, Peerson JM, Lee JY, Rutledge JC, **Hwang DH. Postprandial inflammatory responses and free fatty acids in plasma of adults who consumed a moderately high-fat breakfast with and without blueberry powder in a randomized placebo-controlled trial.** *Journal of Nutrition* 2016, 146:1411-1419.
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- Xin, J, Feinstein DI, Heyna MJ, Lorens SA, **McGuire SO. Beneficial effects of blueberries in experimental autoimmune encephalomyelitis.** *Journal of Agricultural and Food Chemistry.* 2012, 60:5743-5748.
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Obesity

- Moghe SS, Juma S, Imrhan V, **Vijayagopal P. Effect of blueberry polyphenols on 3T3-F442A preadipocyte differentiation.** *Journal of Medicinal Food.* 2012, 15:448-452
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Oral Health

- Lagha AB, LeBel G, **Grenier D. Dual action of highbush blueberry proanthocyanidins on *Aggregatibacter actinomycetemcomitans* and the host inflammatory response.** *BMC Complement Altern Med.* 2018; 18:10.
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